

# MS FR 57

## Fire resistant adhesive sealant

### Description

Fast curing, one-part adhesive sealant based on MS *Polymer*

Elastic, high cohesion, excellent adhesion to a wide range of surfaces, MS FR 57 is suitable for high performance joints and elastic sealing. Non slumping, high gap filling capacity, suitable for elastic adhesive junctions between irregular surfaces. The product contains flame retardant additives, halogen and other dangerous matters free.

- Solventless, isocyanate free
- Virtually no shrinkage
- Flexible at low (-40°C) and high (+ 100°C) temperatures
- Odourless, neutral reaction
- Fast curing
- Compatible with many painting systems
- Excellent adhesion to many substrates
- High resistance to ageing
- Pasty, fast setting

### Field of application

- Assembling of insulated panels
- Bonding of wall panels and rated floor/ceiling assemblies, plasterboard panels, plastic laminate, uPVC to building walls, metal structures
- For bonding overlaps between metal sheets or metals and other surfaces onto which is not possible to realise weldings or mechanical fixing in building, means of transport, metal carpentry
- For bonding stiffening ribs onto metal sheet or fibreglass in structures subjected to vibrations or between materials with different thermal expansion
- Insulation and covering of containers
- For bonding wood and metal in door and window frames

### Properties

<b>Base material</b>	: MS Polymer
<b>Consistency</b>	: paste
<b>Application temperature</b>	: +5°C+35°C
<b>Packaging</b>	: 290 ml. cartridge
<b>Colour</b>	: yellow, red, grey

### Technical data

<b>Specific gravity</b>	: 1,7 kg/dm <sup>3</sup>
<b>Shore A hardness</b>	: 60
<b>100% modulus (DIN 53504)</b>	: 2,8-3,0 MPa
<b>Tensile strength (DIN 53504)</b>	: 3-3,2 MPa
<b>Elongation at break</b>	: 100%
<b>Tear resistance (ASTM D 624-73)</b>	: 7 N/mm
<b>Skin formation</b>	: 20 min.approx. ( 20°C 50% R.H.)
<b>Curing speed</b>	: 3 mm at 24 hours ( 20°C 50% R.H.)

The values in this table must not be considered as specifications

## Technical data sheet

### MS FR 57

#### METHOD OF USE

**Adhesion and surface preparation:** MS FR 57 has excellent adhesion without Primer to degreased surfaces of steel, galvanised steel, anodised aluminium, to painted surfaces, to concrete, wood, glass, ceramics, GRP, uPVC. In particular conditions, i.e. humid and porous surfaces, the adhesion can be improved by application of a suitable primer.

More detailed informations about surface conditioning are available in the **selection chart of Primers for MS Sealants and adhesives - Primer Wp.**

**Application of adhesive:** MS FR 57 can be applied by gun onto only one part. Join the parts together within 10'-12' exerting a light pressure. When compressed the thickness should be not lower of 1-2 mm. in order to allow the correct curing and to exploit the adhesive and cohesive characteristics of the product.

On to big surfaces the adhesive can be applied in parallel lines distant 20-40 cm. and along the perimeter. Cure is realised by humidity, in presence of non porous surfaces it can be accelerated by nebulizing the parts by water before assembling.

Put the part in contact within 5 minutes by using an adequate pressure. If necessary maintain under pressure the parts until a complete cure.

#### STORAGE STABILITY

9 months from the date of manufacture at a temperature range of +5°C+25°C.

**SPECIFICATIONS COMPLIANCE:** MS FR 57 has been tested and rated by LAPI according to the following requirements:

<p><b>Reference standard:</b> UNI CEI 11170-3 2005+ FA2007chap.6, prospect 1 "acceptance criteria for materials and components of equipment"</p> <p><b>Test methods</b></p> <p>EN ISO 11925-2:2002 ignitability of building products subjected to direct impingement of flame</p> <p>NF X 10-702-2 1994 + NF X 10-702-1 1995</p> <p>Opacité des fumées en atmosphère non renouvelée NF X 70-100-1 2006 + NF X 70-100-2 2006</p> <p>Methodes d'analyses des gaz provenant de la degradation thermique NF F 16-101:1988 materiel roulant ferroviaire- comportement au feu.</p> <p>Choix des materiaux Determination of the fire resistance performance in accordance with BS 6853:1999 and BS 476-20:1999 (determination of the integrity and the insulation of different types of joints)</p>	<p>Complies with the requirements for the materials belonging to the category "gaskets" all hazard levels until LR4 included</p>	<p>Compliance certificate 083/GK09</p> <p>NO.884.0DC0030/09</p> <p>NO.884.5AF0010/09</p> <p>NO.884.5AF0020/09</p> <p>1363.0BS0245/09</p>
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The variability of materials, substrates and use conditions is such that no warranty of their functionality for a specific application can be deducted from this information, from written recommendations or any other type of suggestion offered.

Each user has the responsibility to complete adequate evaluations on the efficacy of the materials offered by Fratelli Zucchini, of its products, services, recommendations and suggestions for the specific application need, and must accomplish in sufficient testing to ascertain that the final product will be safe and sound for the final intent of the end-user.

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